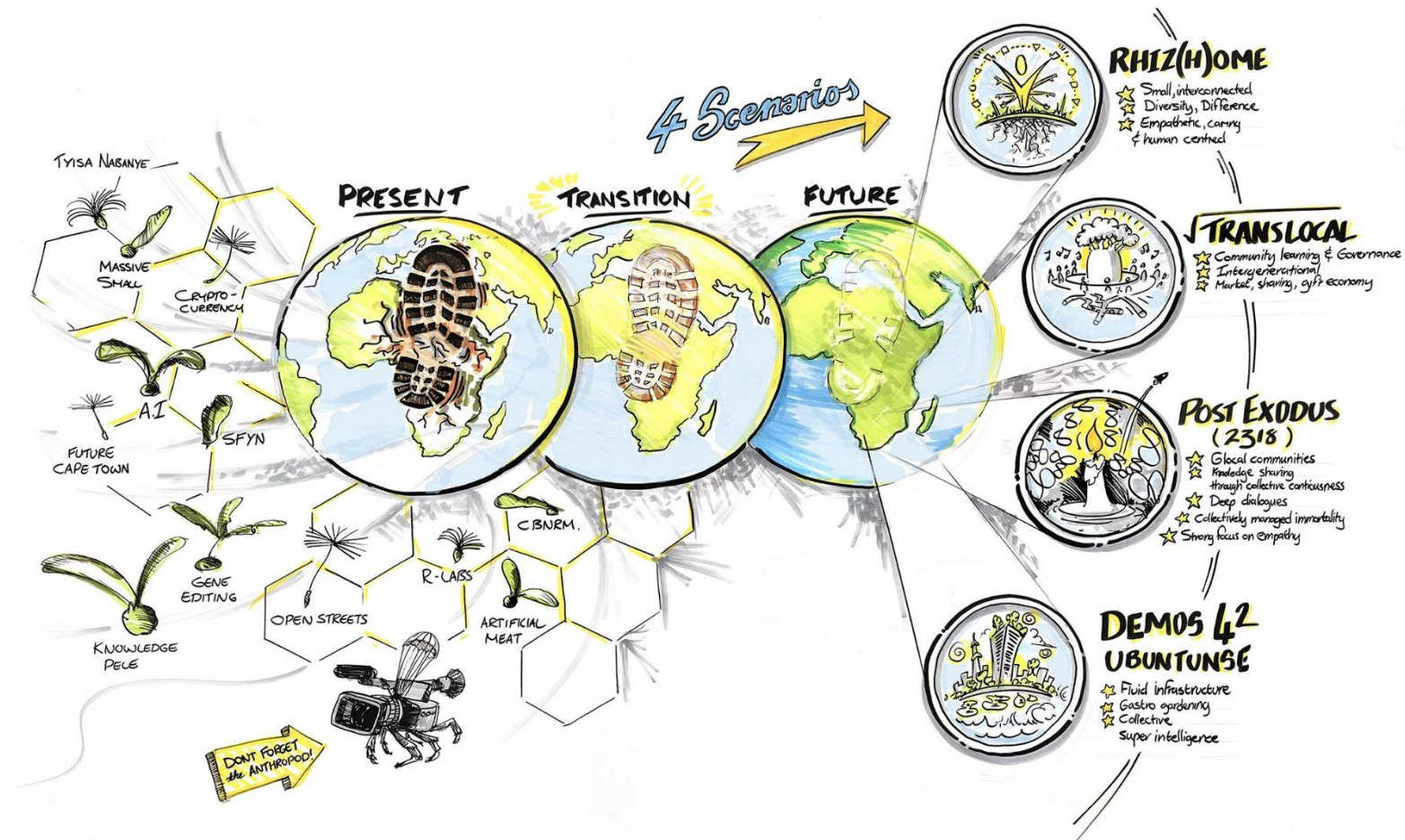Report on the

# Anthropocene Visioning Workshop

15 – 18 November 2016, Cellars Hohenort, Cape Town, South Africa

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# 1. Introduction

The Anthropocene[1], or literally the "Age of Man", is the name for a new geological epoch which we have entered, in which humanity has become a dominant global force shaping the physical dynamics of Earth. In the Anthropocene, we face new and diverse challenges, such as planetary tipping points, an increasing disconnect between people and nature, and widening inequalities among people. At the same time, technological progress and new social connections are opening up novel and exciting opportunities for addressing these challenges and could potentially create unprecedented levels of human well-being.

The workshop described in this report is linked to the "Seeds of Good Anthropocenes" initiative[2] which aims to solicit, explore, and develop a suite of alternative visions for "Good Anthropocenes" – positive futures that are socially and ecologically desirable, just, and sustainable. This collaborative initiative is led by McGill University in Canada, the Stockholm Resilience Centre in Sweden, and the Centre for Complex Systems in Transition (CST) at Stellenbosch University in South Africa, and was initiated through funding as a Fast Track Initiative under Future Earth[3]. The aim of the initiative is to counterbalance prevailing dystopic visions of the future that may be inhibiting our collective ability to move creatively towards a positive trajectory for the Earth and humanity at local, regional and global scales. As pointed out by Alex Evans, stories are powerful things: they create our reality as much as they explain it. The futures we envision, be they positive or futures of collapse, make us much more likely to respond to events in the world in a way that helps create that future.

The underlying premise of the Seeds of Good Anthropocenes initiative is that creating good and sustainable futures may require a fundamental shift in the way we live and understand the world, and what we regard as desirable and important for living a good life. In other words, shifting from the current world to a socially and environmentally sustainable and just future may require a shift similar to the shift from the Medieval to the Industrial age in Europe. However, imagining such radically alternative futures is almost impossible. To overcome this, the Seeds of Good Anthropocenes initiative focuses on "seeds", mostly in the form of small-scale, experimental projects and initiatives that employ new ways of thinking or doing and exist at the margin of the current world. These can be new social institutions, technologies, or frameworks for understanding the world that are not yet mainstream. Over the past two years, we have been collecting such seeds through online surveys conducted globally through our research networks, and a number of workshops in southern Africa, funded by Swedbio in Sweden.

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[1] http://anthropocene.info/
[2] https://goodanthropocenes.wordpress.com/
[3] http://www.futureearth.org/

The workshop described in this report represents the first attempt within the larger Seeds of Good Anthropocenes initiative to generate actual scenarios or visions of radically alternative "good" futures based on these seeds.

We focussed specifically on generating a set of visions of the Good Anthropocene for the southern African region, loosely defined. Since such an exercise had not been conducted before, we had to experiment with new approaches and methods. The intention is to use the learning from this southern African exercise to run a larger scenario development exercise for the global project. Another important objective of the exercise was to bring together people from different seed initiatives, together with scientists, artists, policy-makers and practitioners to learn from one another, connect, and be inspired to work towards a better future. The workshop was funded by the Guidance for Resilience in the Anthropocene: Investments for Development (GRAID) project, led by the Stockholm Resilience Centre in Sweden, and funded by the Swedish International Development Agency (Sida).

## 2. Process & Methods

The Anthropocene Visioning Workshop used a process and methods that were custom-designed, meaning they were novel and experimental, but grounded in futures research methods and methodology. The reason for this is that the complexity and radical differentness of the Anthropocene, particularly in southern Africa, requires new, different ways of working and thinking. Merely extrapolating from present trends, or working with existing ideas of what the future might look like, may not be worthwhile or useful in this context. The process, tools and methods needed for the workshop had to embody systemic change and express complex systems futures. Linear cause-and-effect thinking and "flatland", "snapshot" futures with few dimensions would not be appropriate.

The objective of the exercise was to generate visions (scenarios) of potential Good Anthropocenes in southern Africa from a divergent set of seeds. This required a method for building scenarios that starts with weak signals of change and focusses on maximizing the degree of difference from the present, and explores how emerging innovations can stretch the future. Furthermore, the approach chosen recognized the critical importance to engage and dialogue not just around visions of the future, but also around transformation and transition, all from deeply different perspectives.

Based on these needs, it was decided to adapt the Mānoa[4] scenario building method and combine it with the Three Horizons Framework, as explained in more detail below. It was also decided in advance to deliberately adapt the process during the course of the workshop should the need arise.



*The Cellars Hohenort*

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[4] The original Mānoa method for building scenarios was developed by Dr. Wendy L. Schultz. Acknowledgement and thanks are due to Wendy for providing valuable input, inspiration and advice on adapting her method for this initiative.

## 2.1 The process

The workshop was built around 23 participants made up of a roughly equal mix of scientists, artists, social entrepreneurs, and social/policy people, split into four groups with a mix of group work and plenary sessions (see section 8 for a list of participants). Each group built a scenario of the Good Anthropocene starting off, and working, with three highly divergent seeds: two southern African seeds and one technology "wildcard" seed (for an overview of the different seed initiatives used, please refer to section 7). The intention was that participants work in the same groups throughout the process, but switching groups was possible if called for by group dynamics.



*PRACTIS session*

A particular effort was made to ensure appropriate space, physical as well as conceptual. Physical space refers to four private breakout rooms with lots of wall space on which to work visually, as well as a plenary room for the group as a whole, whilst conceptual space refers to the participant-generated and participant-owned content, including the time required to produce it. The first afternoon was designed so that participants and facilitators could introduce themselves, get to know one another, learn more about the topic and start developing a "shared language" for dialogue during the remainder of the workshop. This was done by means of a presentation about the Anthropocene by Oonsie Biggs, and a PRACTIS (Platform for Research in Art, Culture, & Theory in Society) session on Art, Imagination and Futures facilitated by Rael Salley.

The main part of the Anthropocene Visioning Workshop process was then structured into three distinct tranches spread over three days as follows:

**Day 1: From seeds to scenario skeletons**

The first day began with a general introduction to the workshop, its objectives, and the overall proceedings. Three diverse seeds were then allocated to each group. The first exercise for the groups was to construct Futures Wheels around each seed. The seed was, however, not imagined in its current form, but as a mature condition. This means that the seed initiative in question was envisioned as a mainstream way-of-doing, rather than a "marginal" activity. Constructing Futures Wheels is a method for identifying primary,

secondary, and tertiary consequences[5] of trends, events, emerging issues, and future possible decisions – in this case seeds.
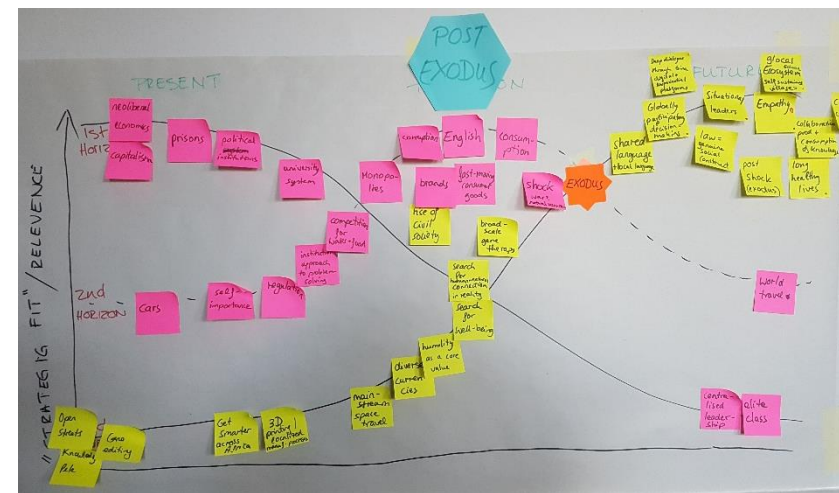


*Future Wheels*

In general practice, the wheel helps in developing the connections between emerging change and its consequences for society. In the afternoon, groups went on to populate cross-impact matrices. A cross-impact matrix assists in generating content by thinking how one seed impacts another and vice versa. This highlights change collisions and/or synergies between the seeds. In a final step for the day, groups created Influence Maps from the Futures Wheels and added content from the Cross-Impact Matrices. This entailed identifying interactions, both amplifying and conflicting, between impacts and

sub-impacts of the seeds as mature conditions. Then it was a matter of standing back, reflecting on all the output and identifying the emergent story. At the end of the day, each group presented their scenario "skeleton" by means of one artistic image (any medium), three fictional statistics and a social commentary / news headline.

**Day 2: Deep dive into scenarios**

The second day started off with a brief recap and outline for the day's proceedings, after which the groups retreated to work together and create bold, vivid, hopeful scenario narratives – Visions of a Good Anthropocene in southern Africa. This entailed group discussions and collective imagining to describe and "flesh out'' the scenario skeletons that had been produced the previous day.



*Three Horizons Framework*

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[5] These consequences and impacts should ideally include STEEP-V domains (Social, Technological, Economic, Environmental, Political and Values) as well as ethnographic (human behaviour) ones.

In the afternoon, each group connected their future vision (their scenario) to the present by mapping out a Three Horizons Framework – looking for, and talking about, systemic changes, amplifications, clashes and potential inflection points. Three-Horizons is a graphical approach developed to show how the importance of issues can change over time. It is essentially a systems model about the way things change, and can simultaneously be used as a "pathways practice", systemic change and transition space tool. The end of the day was spent by each group preparing for the next day's presentation and sharing of their scenario.

**Day 3: Share scenarios, learnings and reflections**

The final and third day saw each group creatively share their scenario story, in a variety of different ways. There had been no instructions on how to present the scenario, and each group displayed high levels of artistry. This sharing session was followed by a collective "incasting" session (in plenary), concentrating on findings, learnings and insights. The afternoon was spent in a reflective summary conversation, and a discussion of the next steps.

Throughout the three days, an "Anthropod" filming station was set up, and all participants were encouraged to drop by and share their reflections and impressions of the process. These are captured in a summary video available at the CST YouTube channel. Further reflection on how well the process and methods worked is summarized in section 5 of this report, under "Learnings and Reflections".


*The "Anthropod"*

# 3. The Scenarios

Based on the process described above, four different visions of a good future in southern Africa were generated, one by each group. Each of the four scenarios is briefly described below. A number of common themes emerged across the scenarios and these are described in section 4.

## 3.1 Rhiz(h)ome



The Rhiz(h)ome world is a citizen-led, decentralized, but highly interconnected world, sustained by an empathetic, knowledgeable and empowered citizenry. Collaboration and partnership are a key ethic. In the Rhiz(h)ome world, access to key resources, especially food, healthcare, housing, water, and energy is equitable and context-sensitive. The Earth is seen as a collective resource and base for prosperity, and land ownership has been fundamentally reimagined as stewardship.

This world has emerged through a radical restructuring of the social, political and economic institutions of the southern African region, echoing changes around the world. There has been a fundamental shift in the nature and meaning of work. The alienating notion of labour has been replaced by an emphasis on societal contribution and opportunities for self-fulfilment, expression and agency. Learning and social innovation are celebrated, and different forms of knowledge are valued. Art functions as a means of dialogue and a stimulant to problem-solving.

Citizens participate in a wide variety of local, regional and globally distributed communities based on their skills and interests. Citizenship is about taking responsibility for who you are, what you contribute, and who and what you impact. Technology has enabled high levels of direct participation in decision-making at multiple scales. This allows communities and economies to be local and deeply context sensitive, and at the same time global and richly interconnected.

The shift from ownership to stewardship applies to many environmental resources, as well as social relations. These common goods are largely governed through non-governmental organizations, cooperatives and other citizen-based coalitions, where local contextual knowledge is highly valued. There has been a rise in new ecologically-informed governance units such as bioregions as well as virtual communities. Although governance is much more decentralized, appropriate larger-scale governance structures have been maintained to help redistribute resources, govern the commons, and mediate conflicts of interest. Regional integration of

African communities and countries has consequently strengthened, despite a decline in the importance of the nation state.

Awareness, understanding and respect for nature has greatly increased; people are in tune with their local environment and the cycles of nature. Cities are green; environmentally sensitive building technology is integrated with large, diverse urban green spaces. Highly interconnected smaller cities have replaced the development of further mega-cities, and the distinction between rural and urban is increasingly blurred. Technology has greatly increased the production of environmentally friendly, multi-purpose goods. It has also enabled most food and goods to be produced locally, drastically reducing transportation and waste.

The economy has become process and service-based, rather than output-based. Society has ended its obsession with material goods. Businesses now specialize in creating opportunities for human fulfilment and the generation and sharing of knowledge. One example is the proliferation of businesses that design 3D printing codes that enable onsite manufacturing. This shift has allowed small businesses and cooperatives to become dominant; large businesses are an exception.

The shift in governance structures and the economy was facilitated by technological developments, especially blockchain technology that enables decentralized, self-managed, and communally held records of ownership. The exchange of traditional fiat currency has been greatly reduced; instead, direct exchange of hundreds of different tokens allows expression of diverse human motivations, and local values and customs. This has enabled many previously voluntary activities and participation in citizen and governance structures to be appropriately rewarded.

The Rhiz(h)ome world is fundamentally marked by a commitment to participation, fairness and justice. The collective fear that characterised previous eras has been replaced by a focus on empathy, reducing cleavages between races, genders, languages and cultures. Difference is valued and respected, and there is formal recourse for marginalised voices and perspectives. There is a constant revisiting of what a good life and citizen is, and a reflexive, learning, adaptive approach to the world. Although many societal structures are smaller and more decentralized, technology enables the world to remain richly and deeply connected, guarding against parochialism. There is an openness, awareness and curiosity about the wider world and human nature. The Rhiz(h)ome world is one that values imagination and in which new futures are continuously cultivated.

## 3.2 Radical TransLocal

I am equal to my peers, siblings, parents and neighbours. My opinion matters just as much as theirs does. The diverse skills I have honed since I was young mean that I am good at a variety of things, but I also know what I am really passionate about. This means that I can help my community in different ways. Because I understand what it takes to produce something, whether it is a new app, gourmet iMeal or a virtual play, I am more appreciative thereof. I also understand what it means to not always succeed, and as a community we have a higher acceptance of adaptive learning.

I have already cast my vote this morning and my voice has been heard. Later under the tree we will take the matter further. To mitigate this challenge, we will go the route that does the least harm to our Mother, the Earth. She is what nurtures us, heals us, provides and supports. She keeps us in check by only giving us what is needed, where it is needed.

These urban learning initiatives were catalyzed by the community based natural resource management forums. This new form of government meant that community engagement trumped local governments as the knowledgeable community. This change carried over in how we think of ownership. We now have a system that acknowledges stakeholder-based property rights which increases community buy-in and investments in local assets and ecosystem services, ethical modes of production and consumption. This also led to a reduction of economic migration and allowed people to move around between rural villages and cities because they chose to, not because they were forced to.

Where I do struggle, I turn to art. I express myself through listening, seeing, feeling, smelling and tasting. I relate to others through art too. My difference is acknowledged and celebrated, as is everyone else's. I share what I have and there is no need to accumulate what is not necessary, since Mother will provide. I share and exchange with those in my landscape, in accordance to what VERITAS prescribes. VERITAS – the Virtual Ecocentric Redistributive Index Tax Adaptive System – is an artificial intelligence that accounts for the full ecological cost of all the products I use every day and provides opportunities for me to improve my eco-status. When Mother Earth no longer can provide, I will return to the system and feed the next one.

It is unclear where it all started but every tree became a sacred beacon of hope where communities gathered, debated, governed, made decisions and most importantly taught and learned. Edutourism forms an integral part of our work and income and in such a way we can also cherish and expand the indigenous knowledge

systems that we have re-discovered as a source of connectedness to nature and each other. We also exchange skills and services as part of the sharing and hybrid economy that mark our age. What started as a community meeting under a tree eventually became an ecocentric community-based movement that embraces social and environmental issues equally. Going back to the roots of humanity was a simple yet radical notion that captured the hearts of all across the globe.

Technology facilitated the movement by freeing people from the offices, workstations and mundane jobs. Most importantly, technological advancements in food meant that everyone had enough food to eat without having to work too hard for it. Techno-food and the iMeat3000 processor changed the way the world interacted with nature very much the same way that the smartphone of the 21st century changed the way humans communicated. This led to a decrease in industrial food production and waste, and also to an expansion of designing different kinds of healthy food, such as cauli-fish©.

VERITAS helps Mother Earth and also keeps us in check. Fortunately, I am healthy since my diet is aligned with what my body needs. No greenhouse gases are emitted into the atmosphere from agriculture and transport. I am happily immersed in my surroundings, all natural and considerate of all creatures (microbes to mammoths).

### 3.3 Post Exodus

*Welcome to the Year 2318.*

*This is the **Post Exodus** era.*

*In this world, truly glocal communities are centred around local production and consumption of products, resources, and culture – while technology connects these local village ecosystems to the global knowledge commons.*



*Exchange happens in the Collective, where self-expression is the highest form of currency.*

*Advanced gene therapy has resulted in the eradication of disease and long, long healthy life spans.*

*Decisions are made with the help of situational leaders, through a system of deep dialogue where knowledge sharing and reciprocal understanding are the foundation for this world's principal and most revered value: Empathy.*

In the near future, natural resource scarcity and socio-economic inequality leads to an increasingly polarized society. Social unrest and backlash against the elite becomes more and more common. In an effort to counter globalization forces, communities start to experiment with localized, direct production systems using technologies like 3D-printing and diversified currency systems.

Education becomes less centralized, and spreads widely via virtual learning platforms. In the wake of stronger community development and independence, the top-down institutional approach to problem solving weakens, and civil society rises as a powerful force. Monopolies fall, and brands lose their appeal. The global elite recognizes the limitations of Planet Earth and invests heavily in space travel and planetary colonization, as well as gene technology to eradicate diseases and prolong life. Natural resources are continuously and radically degraded in the elite's pursuit of advancement. The competition over resources like water and food ultimately culminates in great wars, and the flight of the elite to new extra-terrestrial colonies.

Those who remain, Earth's post-humans, are left with a punished planet, where resources are scarce and old institutional systems have been destroyed. However, the developments in gene therapy mean that everyone lives a healthy, long life. People in southern Africa reside in thousands of small, distributed, local communities (rather than large cities) and focus on building localized, closed-loop production and consumption systems where there is no waste – resulting in thriving, enterprising village ecosystems with strong African identities. The advancements in technology allow for these village ecosystems to be digitally connected to each other across the globe, forming truly "glocal" communities. People meet, interact and share knowledge and experiences in "The Collective", a physical and virtual community space, where cultural and artistic self-expression is highly valued. At the core of the Collective is building the understanding between people, cultures and contexts, to encourage empathy and humility. A newly developed, globally shared language allows for this engagement between communities, while local languages and cultures are actively maintained.

Decisions are made through a system of deep dialogues, which are held through digital and physical platforms to enable a fully participatory process. These collective decision-making processes are assisted by situational leaders that provide particular expertise and knowledge for specific situations. Such a globally participatory deep dialogue is used, for example, to discuss the potential of limiting post-human life spans to 350 years, based on the belief that life and death are circular. There are no centralized leadership structures, or even legal institutions. Law is a genuine social contract, and prisons do not exist. Conflicts are addressed through deep dialogue and reciprocal understanding. As a whole, society is slowly moving towards a collective consciousness, brought about by extensive knowledge sharing and profound empathetic engagement.

## 3.4 Demos 42 Ubuntunse – Softening the Age of Humans

Many of us in the Southern African community remember the day when the spark in the midst of crisis became Demos42, our collective super intelligence that connects and guides humanity, based on the principle of Ubuntunse. S(h)e emerged as the antidote to false data by using our collective thinking to create a nurturing super-intelligence on which the vision of our fluid society is founded. Knowledge is power. Power is knowledge. Emotion is power. Out of Demos 42 an era of radical transparency emerged; the line between leaders and followers no longer exists. Power and expertise are diffused and due to Demos42's demilitarization process, there are no longer borders - no nation states and no passports and therefore no hierarchical governance system. We convene meetings when there are issues to discuss and Demos42 ensures that people with the necessary expertise are present - and she intervenes if they do no uphold the ethos of our collective, ungendered society.

*Inshita yankondo naipwa. Pa li ino inshita tatukwete indeke, ifyanso ne mufti isho twakwete na shiya. Demos42 naibomba inchito yakwe elo ne fyanso fyonse nafipwa.*

Bruce Lee sowed a seed of comprehension that only bore fruit many years after his passing. He spoke of the spirit of water; that it is formless and shapeless, adaptive and fluid. We base our world on this principle. Our infrastructure is fluid: a complete reversal of the (un)civil engineering from the past that was built for functionality and not for humanity; it had no feeling, no soul, no human interaction. Previously we built hard, straight line infrastructure for a single purpose - thus a road, a building, a stadium was meant to exist in that form for decades, but this was problematic as our needs changed. With the advent of AI and especially 4D printing ("intelligent" 3D printing), we were able to rethink this approach, drawing from nature in a kind of true biomimicry. We now print components of infrastructure that can be used multiple times in many different forms as they are literally "shape-shifting" according to needs in time and space. Think of intelligent Lego blocks (many of which are self-energising using solar energy), which construct themselves into built forms as needed e.g. as an office building during office hours, a gym before and after and as a canteen at lunchtime; or a sports stadium just for match-day, which then reverts to another structure after the game is over. The multipurpose usefulness means that less space needs to be taken up by built infrastructure, freeing up much needed space for other activities, especially communal uses such as gastro gardens, renewable energy generation, and water catchment.

Food was the catalyst for changing social relations through the concept of a "slow-food" nostalgic future that is progressive, but recognizes the knowledge of the past. We grow 3-D vertical and horizontal gastrogardens from which we gather edible plants and insects. Everyone has the ability to grow and prepare food through

communal ownership of space and choice of functions, and we store our food underground using the knowledge of our ancestors. Our living spaces are alive and gastronomic knowledge is available to everyone who now has the time to use their skills, freed from the drudgery of the every-day, now undertaken by our shapeshifters.

*Ngenxa ka Demos42 sikhululekile. Kuphele konke ukubandlululo noku ngethembani phakathi kwabantu. Sisonke. Sibanye.*
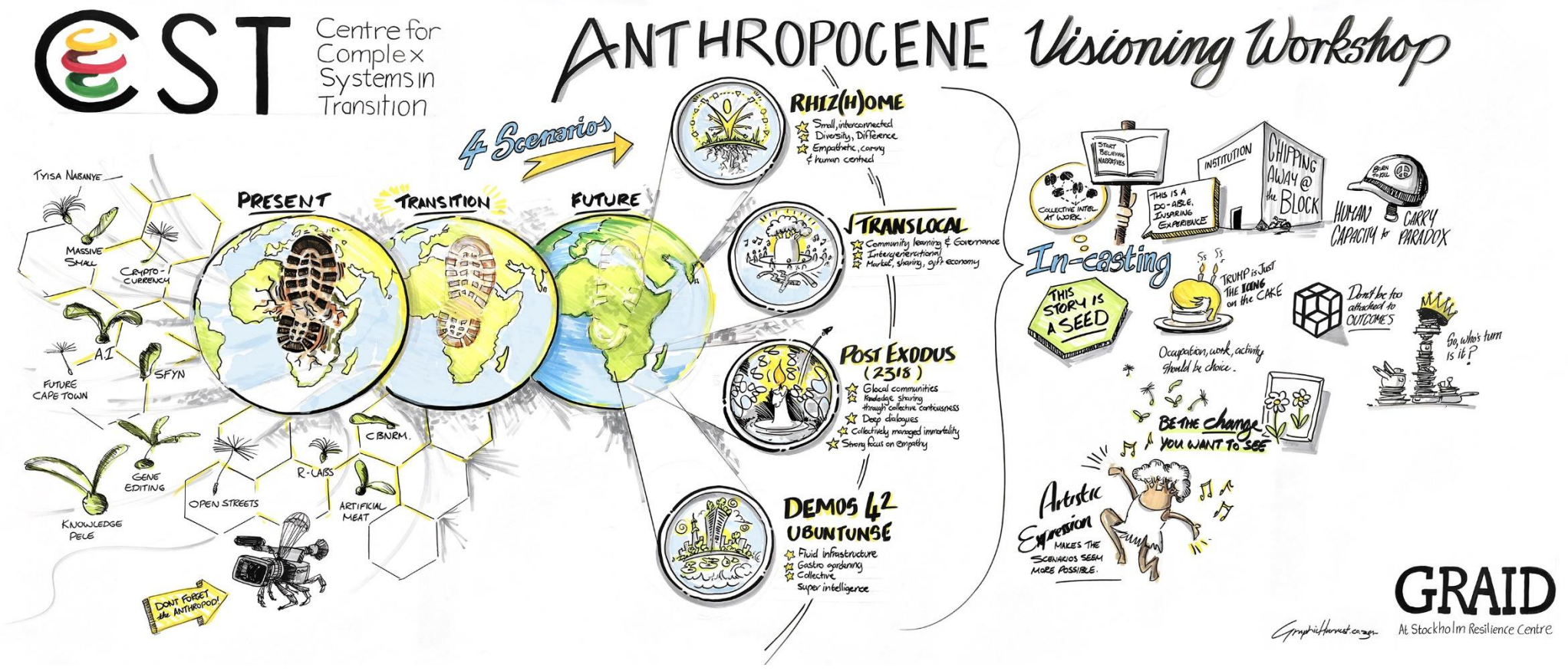


*Summary of the workshop (image by Graphic Harvest)*

# 4. Common Themes and Points of Divergence

Unlike most other scenario planning exercises, this process was not specifically designed to come up with four distinct storylines that each fit neatly into one quadrant along two axes of divergence. The workshop allowed for emergence and creativity, anchoring the storylines in the Seeds initiatives, but allowing complete free reign in all other aspects. Commonalities, as well as differences, therefore emerged independently. The key points are discussed below:

## 4.1 Decentralization and a strong citizenry

One of the themes that comes through strongly in all four scenarios is the decentralization of systems and governance. Local communities organize their daily lives, and there is less emphasis on central institutions and government. For instance, in the Demos42 scenario, infrastructure development takes place spontaneously, according to current, local needs. There is no central planning. However, in the Rhiz(h)ome scenario, centralized and higher-lever governance still performs an important function for issues of coordination that need to occur at larger scales. Linked to this theme of decentralization is a dominance of citizen-led initiatives and decision-making. In the Post Exodus scenario, for example, decisions are made collectively by direct citizen participation, under the guidance of leaders that are temporary and situation-specific.

As illustrated in the description of the Radical TransLocal world, these more collective, participatory and localized systems spread power in society, reducing gender and other social inequalities. In the Post Exodus scenario, the elite even exits planet Earth, leaving behind a more equal society. The superintelligence Demos42 ensures radical transparency and equity. In all the scenarios, diversity in all forms is valued and encouraged, based on the recognition that a diverse whole is greater than the sum of its parts.

## 4.2 Connectedness and empathy

All the scenarios are characterized by high levels of connectedness: between people; between people and nature; and between local communities, enabled by advanced technology. Demos42 ensures complete technological connectedness across the planet, and similarly, in the Post Exodus scenario, technology enables the thousands of village ecosystems to be in close virtual contact. Similarly, the Rhiz(h)ome scenario sees the development of many



*"Post Exodus" scenario presentation*

highly interconnected small cities, rather than the growth of mega-cities.

But, importantly, the connections are not merely technological. The connectedness goes deeper, expressed in empathetic human relationships and a reconnection to the biosphere. In Post Exodus, for example, production is local and circular, without waste, resulting in village ecosystems that are deeply embedded in nature. Similarly, trees become the central point and symbol for collective decision-making in Radical TransLocal, and Mother Earth is seen as the ultimate provider and receiver of all.

## 4.3 Post-consumerism

All the scenarios describe a change from the current consumer culture towards a post-consumerist ethic, where products and services are mostly produced and consumed locally in ways that don't transgress planetary and local social-ecological boundaries. Closed-loop production and waste schemes dominate. In the Radical TransLocal scenario, VERITAS – an artificial intelligence management system – provides instant personalized information and guidance on sustainable resource use options.

In addition, the economy becomes a shared social process, in which money is but one of many currencies of exchange. The common good is highly valued, and the nature of work itself is transformed: Jobs are now self-actualizing activities that support the community, and education is no longer focused on producing ''workers'', but rather productive and fulfilled members of society, encouraging collaboration and cooperation over individualism and competition.

## 4.4 Ecocentric values

All scenarios express a shift in values, or perhaps a revival of ancient values, away from the human-centred or anthropocentric worldview towards a nature-focused or ecocentric point of view. The relationship between humans and the planet becomes about stewardship, rather than exploitation.

Through systemic changes in technologies and values, all scenarios resolve the current food and water insecurities – there is enough for everyone in these southern African futures. In the Demos42 storyline, for example, communal gastrogardens that grow vertically and horizontally provide sufficient food for people. Having dealt with the priority issues of food and water, other natural resource governance challenges are easily overcome.

## 4.5 Divergences and risks

While the scenarios share some common themes, there are also points of divergence and risk factors that become apparent. For example, one of the scenarios, Post Exodus, had a time of great conflict and collapse built into its storyline, which ultimately lead to the exodus of the elite from the planet. In contrast, the other scenarios describe a smoother transition to the positive futures, which begs the question: How do we avoid collapse in southern Africa and the world? One of the greatest challenges in achieving a smooth transition appears to be that of dealing with entrenched power structures and existing inequalities. Currently, people/institutions/nations with the most power have the least incentive to change the system. To deal with this, most of the

scenarios outline a devolution of power to the people, and a change in the role of government so that it becomes more a facilitator of citizen-led initiatives, and less a provider of policies and services.

However, one of the greatest risks of decentralized systems of governance and autonomous communities is the creation of fascist niches. How does one avoid inward-facing societies that fear or resent everything that is "other"? Mostly the scenarios deal with this challenge through technology-enabled radical openness and transparency, exemplified by Demos42 or the global Collective in Post Exodus. But the role of technology highlights another major risk factor: Technology itself is neither good nor bad, but it can be used to manipulate people and increase inequalities by those in power. This is one of the main paradoxes of the Anthropocene: Technology may help us reduce inequalities and differences between people, but it may also contribute to widening the gap.



# 5. Learnings and Reflections

The workshop was structured in ways that allowed for learning, by creating various opportunities for reflection on the participatory process and experiences. Sufficient time and space allowed participants to contemplate – both individually and collectively – the process and the content of the scenarios that were co-created. Learning was assisted by a number of specific interventions: Firstly, upon arrival at the workshop the participants were handed booklets and were encouraged to make notes of their learnings and reflections. Secondly, all workshopped material – from the Future Wheels to the Three Horizon Frameworks – were put up on the walls of the breakout rooms to be visible to all groups after the sessions. The materials on the wall served as key support tools for participants to co-construct their ideas, theories and insights, but also to revise, reflect and rethink their contributions. Finally, the "Anthropod" – a private video camera booth – served as a space for participants to visit whenever they wanted, where their reflections, insights or critiques could be captured in a quiet area away from other group engagements. Participants were encouraged and reminded throughout the workshop to visit the Anthropod.

## 5.1 Participants' learnings

A key theme that emerged from the reflections of the participants, was the role that the arts could play in fostering and triggering transformations in social-ecological systems. In the Radical TransLocal group's scenario, a deep engagement with the arts was the trigger for a move from a dystopian society to the eventual good

Anthropocene. But beyond the importance of art in the scenario storylines, it played a pivotal role in the process of creating the scenarios, truly envisioning the future, and relating those visions to the other participants. As one workshop participant put it:

*"One of the things that was really remarkable for me was the depth actually of that multidimensionality and the performance today. It felt like the facilitators were helping us feel our way into the visions of the good Anthropocene that people were trying to express. And they did."*



The inclusion of artists in the groups contributed to the experience of the future that was being created before the participants' eyes. It had a powerful effect, as this participant explains:

*"The performative element, that was in each of the ways the groups presented the scenarios were super powerful. It really was a distillation, extrapolation and creative reworking of those three seeds we started with."*

In addition to the role of the arts and creative expression, the diversity within the participant group also contributed significantly to the process. The diversity was apparent on many levels, from the participants' area of expertise and backgrounds to their nationalities. There was a realization that there were many different ideas of what a good Anthropocene could look like, though the resulting visions were not as fundamentally different as might have been expected (see section 4). As this participant points out, the diversity among the participants added complexity to the process, and became a challenge not so much during big-picture visioning, but when it came to the details of the transformation to a good Anthropocene:

*"One of the nice things was that we didn't know each other…there was a mystery element and we didn't know how this will proceed. But when it comes to fleshing things out and putting much more detail onto it, that's where you get into a lot of more difficult issues. When people's lived experiences, professional lives, when things they thought and the values they hold all come together, it can become a set of challenges."*

This diversity of ideas and perspectives also meant that the workshop was, at times, challenging and emotive. As this participant remarks:

*"It's been hard work. Emotionally difficult work. To think into the future and in that process to kind of really try very hard to let go of some of your pet ideas, things that make you feel comfortable. Some of your unquestioned ways of engaging with the world."*

Some participants found the process to be personally transformative in that they started to believe very strongly in their co-created

alternative vision of the future. One person expressed that the exercise had transformed the way she felt about and envisioned the future, and that it filled her with a sense of hope – but also a sense of responsibility, to encourage the initiatives and ideas that could help lead to this bright future.



## 5.2 General reflections

It was beneficial to the learning process that the programme allowed for sufficient and ample time to fully engage with each other. Sessions were not rushed, and group work time was generously allocated. In addition, the workshop itself was held in a comfortable physical space with sufficient break-out rooms and privacy. The workshop was designed so that the same people remained together in a group throughout the whole process, with some flexibility in terms of moving one or two people into different groups when dynamics required this. This helped the scenarios take on the groups' identities and fostered a team spirit among the groups.

The introductory session at the beginning of the workshop set the tone for a relaxed, informal process in which participants could feel safe and which allowed them to be open and creative. As explained by this participant:

*"The most valuable part of this whole process, I think was already indicated when we had our introductory session with Rael on Tuesday when we arrived. And this was really the idea of freeing our imagination of what simply was available to us at this moment in time. And I think it is really critical that we remember that the output, the futures that we designed are still actually present futures because even if we didn't imagine them at the beginning of this process, we have now added them, and so they have become in a sense part of the world that we are tangibly engaging with."*

One of the main challenges that participants had to grapple with, was this idea of paradoxes and contradictions. These exist in the present all around us, and they will exist in the futures we create – but it requires acceptance of this fact to move beyond some of the major sticking points. Yet it is these points of contention at which key breakthroughs in understanding often occurred within groups.

Finally, the fact that the scenarios were mostly unconstrained, apart from the instruction to focus on southern Africa, allowed for creativity to soar. In addition, the visual depictions of the scenarios by the Graphic Harvester greatly enhanced the participants sense that they were coming up with potentially real, tangible futures, which in turn encouraged deeper engagement and identification with the future visions.

# 6. Next Steps

This section aims to outline some of the key outputs that are envisioned from this workshop. Beyond the knowledge and relationships built among the participants during the workshop, there are also some concrete products to be disseminated.

One of the main outcomes from this workshop will be communication material in the form of videos, an illustrated guide that outlines the process followed here, as well as a number of scientific papers. Two videos are already available online at the CST YouTube channel: One video outlines the purpose of the workshop and key reflections by participants, while the second video describes the methods used in this visioning exercise. There will also be a whiteboard video, based on the illustrations produced by Grant Johnson, the graphic harvester. This video will summarize the workshop, and briefly discuss the four scenarios that were created. The guide will be a document aimed at providing an overview of the process to anyone wanting to emulate it in their own context, with more detailed information than can be communicated in a video.

At the end of the workshop, participants expressed the need to target products for particular audiences, like printing the large scenario graphic (page 16) on canvas, to be taken to major international meetings with decision-makers. The idea is to make more people aware of this work on envisioning positive (and radical) futures for southern Africa, and to build partnerships around these visions –

especially with business leaders. Another suggestion was to organize an "Anthropocene Festival", or to link an exhibition to an existing event like the Well-Being Economy Festival taking place in South Africa in November 2017. This festival could showcase visions of good Anthropocenes, giving people a taste of what the future could look/taste/feel/sound like, and it could be a platform for Seed initiatives to present their important work.

Any workshop outputs and related activities will be published and advertised on the CST website.

## 7. Overview of "seed" initiatives

The following is a brief overview of the different "seed" initiatives that were chosen for the workshop. Each of the four participant groups received three seeds with which to begin building their scenario. The colour-coding indicates which seeds were selected to be in the same group. Seeds within a group were purposefully chosen to represent dissimilar and diverse initiatives, to allow innovative and radical connections to be made in the scenario development process. In the end, the following scenarios emerged from these groups: green = Rhiz(h)ome; yellow = Radical TransLocal; blue = Post Exodus; red = Demos 42 Ubuntunse.

| Seed initiative | Brief description | More info |
|---|---|---|
| Tyisa Nabanye | Tyisa Nabanye is a non-profit organization located on the slopes of Signal Hill in Cape Town. Started in August 2013, this collaboration between food security activists, neighbours and people living on the site, aims to create a space in which to explore the growing of food in an urban environment. Activities include an organic vegetable garden, an indigenous nursery, a weekly market, workshops and events that support the goals of food security and employment creation. | https://www.facebook.com/tyisanabanye/ |
| Massive Small | Massive small is a global network changing systems to unleash the power of smallness in cities. It was established five years ago as an independent, free thinking, open-source organization.<br>The massive small project is the work of the smart urbanism research and development collaborative, a London based social value business. They are creating a concise body of collective knowledge designed to change top-down systems to help and inspire people and governments to work together, allowing communities to shape their own environments and make towns and cities that work for the people, not against them. | http://www.massivesmall.org/ |
| Cryptocurrency | Cryptocurrency is a digital or virtual currency that uses cryptography for security. A cryptocurrency is difficult to counterfeit, and is not issued by any central authority, rendering it theoretically immune to government interference or manipulation. This digital currency makes it easier to transfer funds with minimal processing fees, allowing users to avoid the steep fees charged by most banks and financial institutions for wire transfers. | http://www.investopedia.com/terms/c/cryptocurrency.asp |

| | | |
|---|---|---|
| Community Based Natural Resource Management | CBNRM is a concept based on the ideas of community participation in the management of natural resources through democratic decentralization that leads to development and poverty alleviation, whilst also resulting in the sustainable use and conservation of natural resources. It empowers communities by providing rights over land and natural resources, building skills capacity, establishing community decision making bodies and promoting community advocacy. | https://en.wikipedia.org/wiki/Natural_resource_management#Community-based_natural_resource_management |
| Reconstructed Living Lab (RLabs) | This global social enterprise was founded in 2008 and aims to reconstruct communities through training, innovation and entrepreneurship. The main hub is located in Athlone, Cape Town. RLabs creates an environment where people are empowered to make a difference in the lives of others. Its central activities are skills and training, community development, social and disruptive innovation, mobile and internet solutions, social enterprise incubation, impact investing and social franchising. | http://rlabs.org/ |
| Artificial Meat | Artificial meat (in-vitro meat) is the idea of manufacturing meat products through tissue engineering technology, using many of the same techniques traditionally used in regenerative medicine. The first cultured beef burger patty was created in 2013. The creation process of cultured meat includes harvesting muscle stem cells from cow neck by means of biopsy. These cells are then induced to grow into muscle tissue in a lab. In a life cycle analysis, it was calculated that in vitro meat may significantly reduce the environmental footprint of meat consumption. | https://en.wikipedia.org/wiki/Cultured_meat |
| Open Streets Cape Town | OSCT is a citizen-driven initiative working towards changing how streets are used, perceived and experienced in Cape Town. Rooted in "street action" and research, the aim is to create shared spaces that bring people together, and to challenge the paradigm of urban mobility by carrying out campaigns, temporary interventions, dialogues and walks that raise citizen awareness, spark public debate, and ultimately drive behaviour change around the role of streets in the life of the city. | http://openstreets.org.za/ |
| Knowledge Pele | Knowledge Pele is a research and development advisory firm who believes in knowledge as the foundation for development. The institution's main goal is to be the leading source of granular information about under-privileged communities, to guide the design of innovative and impactful social investments. The purpose of the company is to develop energy communities, by catalysing structural change through businesses that generate power and knowledge. | http://www.knowledgepele.com/index.html |

| | | |
|---|---|---|
| Gene Editing Technologies | Gene editing allows changing the DNA of any organism. More precisely, gene editing (or genome editing) is the insertion, deletion or replacement of DNA at a specific site in the genome of an organism or cell. It is achieved using engineered nucleases, also known as molecular scissors. Until recently, this editing process was incredibly time consuming and cumbersome. In contrast, CRISPR- Cas9, a new gene editing technology that emerged in the last +/- 5 years, is cheap, quick and easy to use. Given the power and potential of this new technique, researchers hope to use it to eliminate diseases, for example, or create hardier crops. While it is clear that CRISPR has much to offer, its rapid acceleration of the gene editing field has also caused concern about the ethics and safety of its use. | http://www.nature.com/news/crispr-1.17547 |
| Future Cape Town | Future Cape Town was founded in 2010 and has become a leading platform in Africa to inspire more liveable cities. Through their online presence, research and multi-stakeholder collaborations they work towards expanding public access to urbanism in order to promote a more visionary and inclusive city. They are an independent think tank, advocating knowledge and citizen engagement to meet the challenges of a modern city. Future Cape Town is the founding partner of Our Future Cities, which also houses Future Johannesburg, Future Lagos and Future London. | http://futurecapetown.com/ |
| Slow Food Youth Network | SFYN is an international network of young people working towards change in the field of food production and consumption. The network believes in the philosophy of "good, clean and fair" food as a reaction against the upcoming fast food chains. The network unites groups of active young Slow Food members over the globe into one international network, raising awareness about food issues and providing means to take action. | http://www.slowfoodyouthnetwork.org/ |
| Artificial Intelligence | Artificial Intelligence (AI) is the science of making computers perform tasks that require human intelligence. The goal of AI is to build systems that can match or exceed the cognitive capabilities of human beings across a range of domains. This holds potential to drive incredible efficiencies, increase productivity, and if AI reaches its potential, it will likely change our world in unexpected ways. AI has slowly become a major part of our world without some of us even noticing. Indeed, one of the most sophisticated pieces of specialised AI in use today is the Google Search Algorithm. | http://waitbutwhy.com/2015/01/artificial-intelligence-revolution-1.html |

## 8. Participant List

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